

AS

**Notice of Allowability****Application No.**

09/534,723

**Examiner**

Sow-Fun Hon

**Applicant(s)**

NAM ET AL.

**Art Unit**

1772

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 02/05/04 and the terminal disclaimer approved 03/10/04.
2. ☒ The allowed claim(s) is/are 1-4.
3. ☒ The drawings filed on 03/24/2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>03112004</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|   | 9. <input type="checkbox"/> Other _____.   |

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**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

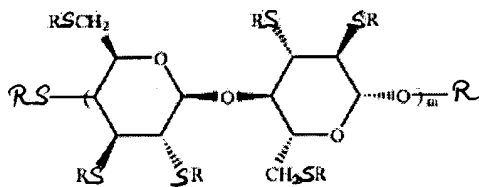
Authorization for this examiner's amendment was given in a telephone interview with Kurt Eaton on 02/05/04.

2. The application has been amended as follows:

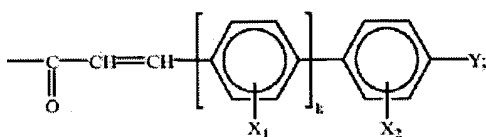
Withdrawn claims 7-42 are cancelled.

3. The terminal disclaimer filed 02/18/04 over US 6,399,165 has been approved.

4. The following is an examiner's statement of reasons for allowance: the closest valid cited prior art of record US 5,405,552 neither teaches nor suggests a liquid crystal device comprising an alignment layer comprising the pyranose polymer



where the spacer S is selected from the group consisting of oxygen, sulfur, NH,  $\text{OC}_h\text{H}_n$ , and  $\text{OC}_h\text{H}_{2h}$ , and  $\text{OC}_h\text{H}_{2h}\text{O}$ , where  $h = 1$  to  $5$  and  $m = 10$  to  $10,000$ , and the functional group R includes  $-\text{CH}_2\text{CH}_2\text{O}-$  attached to



wherein

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$X_1$  and  $X_2$  are each selected from the group consisting of hydrogen, fluorine, chlorine, CN,  $\text{NO}_2$ ,  $\text{CH}_3$ ,  $\text{OCH}_3$ ,  $\text{CF}_3$ , and  $\text{OCF}_3$ ;  $k$  is 0 to 1,  $Y$  is selected from the group consisting of hydrogen, fluorine, chlorine, CN,  $\text{NO}_2$ ,  $\text{CF}_3$ , and  $\text{OCF}_3$ ,  $\text{C}_n\text{H}_{2n+1}$ ,  $\text{O C}_n\text{H}_{2n+1}$ ,  $\text{C}_n\text{H}_{2n+1-x}\text{F}_x$ ,  $\text{OC}_n\text{H}_{2n+1-x}\text{F}_x$ , ( $n = 1$  to  $10$ ,  $x = 1$  to  $2n+1$ ), and a liquid crystal layer between the first and second substrate.

US 6,399,165 is no longer valid prior art due to the statement, in the remarks filed 02/18/04, that said patent and the present application were commonly owned, at the time of the invention of the present application, by LG Philips LCD Co., LTD.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (571)272-1492. The examiner can normally be reached Monday to Friday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571)272-1498. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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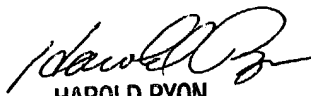
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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8H

Sow-Fun Hon

03/11/04

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

3/15/04